

ABSTRACT OF THE DISCLOSURE

An image data producing apparatus includes comprising at least one stimulating ray source for emitting a stimulating ray, a stage on which an image carrier including independently formed and two-dimensionally distributed specimen spots, at least some of which contain a fluorescent substance, is to be placed, a two-dimensional area sensor, and a controller for irradiating the image carrier placed on the stage with a stimulating ray emitted from the at least one stimulating ray source, thereby exciting a fluorescent substance contained in the specimens, stopping the irradiation with the stimulating ray and causing the two-dimensional area sensor to photoelectrically detect residual fluorescence emission released from the fluorescent substance contained in the specimens. According to the thus constituted image data producing apparatus, it is possible to produce low-noise image data rapidly with a simple operation by irradiating the image carrier including independently formed and two-dimensionally distributed specimen spots with a stimulating ray to excite the fluorescent substance and photoelectrically detecting fluorescence emission released from the fluorescent substance.